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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,289	12/21/2000	Yun Sik Kim	9983.115US01	9259
23552	7590	10/04/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			TRAN, THIEN D	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/747,289

Applicant(s)

KIM ET AL.

Examiner

Thien D Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-24, 26-30 and 32-35 is/are allowed.
- 6) ☒ Claim(s) 1, 12, 13, 25 and 31 is/are rejected.
- 7) ☒ Claim(s) 2-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 25 and 31 recites the limitation "the idle transmission" in "whereby the idle transmission ... the receiving communication means". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Salloum Salazar et al (U.S Patent No. 6,700,878 B2).

Regarding claim 1, Salloum discloses a method for adaptive data transmission in a communication system, which has a plurality of secondary stations (sending communication means) and primary station (receiving communication means) using a shared channel and a dedicated channel, figure 1, said method comprising the steps of:

(a1) monitoring (receiving) in the receiving communication means strength values (data) from plurality of time slots transmitted from the plurality of sending communication means using the dedicated channel, col.4 lines 50-65;

(b1) when the data are received, obtaining an unreserved or not seized slots (idle capacity), col.4 lines 50-65, which is not being used from the maximum transmission capacity which is already allocated to the plurality of sending communication means using the dedicated channel, col.8 lines 1-10; and

(c1) when the idle capacity is obtained, broadcasting shared channel information about the unreserved slots (idle capacity) to the plurality of sending communication means which use the shared channel, col.5 lines 35-45, and later transmitting in the sending communication means the data according to the shared channel information, whereby when the plurality of sending communication means transmit the data by using the dedicated channel via an even number of slot allocated by the primary station (variable transmission rate services), col.8 lines 37-48, the variation rate of the transmission rates of the variable transmission rate data transmission services transmitted from the sending communication means is controlled so that the idle

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transmission capacity can be forecasted for use in other service data transmission, col.9 lines 8-14.

Regarding claim 12, Salloum discloses the shared channel information transmitted in said step (c1) of broadcasting and transmitting includes transmission free slots (rates) according to the channel and number of channels according to the transmission rate of the shared channel, col.5 lines 20-45.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salloum Salazar et al (U.S Patent No. 6,700,878 B2) in the view of Padovani et al (U.S Patent No. 6,574,211 B2).

Regarding claim 13, Salloum discloses the transmitting the data in the sending communication means in said step of broadcasting and transmitting has the steps.

Salloum does not transmitting data according to the available shared channel information of the current unit time  $t$  received from the receiving communication means in response to the data transmission request of the user; and storing some data which were not transmitted in said step of transmitting data to a transmission queue in the sending communication system or canceling the same according to corresponding QoS;

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wherein the allowable transmission rate of the next unit time is received from the receiving communication system in the termination point of each unit time. However, Padovani discloses a mobile station transmitting data according to its transmission rate requested, col.13 lines 37-60, and retransmitting loss data stored in memory due to C/I measurement (corresponding QoS), col.15 lines 30-40, and the adjusting transmission rate (allowable transmission rate) occurring at the next time circuit, col.13 lines 50-60. Therefore, it would have been obvious to one having ordinary skill in the art to include the feature of padovani to the method or system of salloum so that the communication system is more reliable.

Regarding claim 25, Salloum discloses a method for adaptive data transmission in a communication system, which has a plurality of secondary stations (sending communication means) and primary station (receiving communication means) using a shared channel and a dedicated channel, figure 1, said method comprising the steps of:

(a1) monitoring (receiving) in the receiving communication means strength values (data) from plurality of time slots transmitted from the plurality of sending communication means using the dedicated channel, col.4 lines 50-65;

(b1) when the data are received, obtaining an unreserved or not seized slots (idle capacity), col.4 lines 50-65, which is not being used from the maximum transmission capacity which is already allocated to the plurality of sending communication means using the dedicated channel, col.8 lines 1-10; and

(c1) when the idle capacity is obtained, broadcasting shared channel information about the unreserved slots (idle capacity) to the plurality of sending communication

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means which use the shared channel, col.5 lines 35-45, and later transmitting in the sending communication means the data according to the shared channel information, whereby when the plurality of sending communication means transmit the data by using the dedicated channel via an even number of slot allocated by the primary station (variable transmission rate services), col.8 lines 37-48, the variation rate of the transmission rates of the variable transmission rate data transmission services transmitted from the sending communication means is controlled so that the idle transmission capacity can be forecasted for use in other service data transmission, col.9 lines 8-14.

Salloum does not transmitting data according to the available shared channel information of the current unit time  $t$  received from the receiving communication means in response to the data transmission request of the user; and storing some data which were not transmitted in said step of transmitting data to a transmission queue in the sending communication system or canceling the same according to corresponding QoS; wherein the allowable transmission rate of the next unit time is received from the receiving communication system in the termination point of each unit time. However, Padovani discloses a mobile station transmitting data according to its transmission rate requested, col.13 lines 37-60, and retransmitting loss data stored in memory due to C/I measurement (corresponding QoS), col.15 lines 30-40, and the adjusting transmission rate (allowable transmission rate) occurring at the next time circuit, col.13 lines 50-60. Therefore, it would have been obvious to one having ordinary skill in the art to include

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the feature of padovani to the method or system of salloum so that the communication system is more reliable.

***Allowable Subject Matter***

7. Claims 2-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


8. Claims 14-24, 26-30, 32-35 are allowed.

***Conclusion***

9. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (571) 272-3156. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

Thien Tran



STEVEN NGUYEN  
PRIMARY EXAMINER